

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-58 (cancelled)

59. (Currently amended) A genetic construct, comprising:

a conditionally lethal first gene expressible in a plant cell of a plant, said conditionally lethal first gene being ~~selected from the group consisting of~~ a gene encoding indoleacetamide hydrolase (IAMH), ~~a gene encoding isopentyltransferase, a gene encoding methoxinine dehydrogenase, a gene encoding rhizobitoxine synthase, and a gene encoding phosphonate monoester hydrolase; and~~

a second gene expressible in said plant cell, said second gene, when expressed in said plant cell, conferring a non-naturally occurring trait of interest on said plant cell, said second gene being selected from the group consisting of:

- (a) a gene which, when expressed in said plant cell, confers insect resistance on said plant cell;
- (b) a gene which, when expressed in said plant cell, confers an output trait on said plant cell;
- (c) a gene encoding an industrially useful enzyme;
- (d) a gene encoding a pharmaceutically active compound;
- (e) a gene encoding rennin or hirudin; and
- (f) a gene encoding an antisense RNA.

60. (Previously presented) The genetic construct of claim 59, wherein the second gene is a gene which, when expressed in said plant cell, confers insect resistance on said plant cell

61. (Previously presented) The genetic construct of claim 59, wherein the second gene codes for a pharmaceutically active compound.

62. (Previously presented) The genetic construct of claim 59, wherein the second gene codes for an industrially useful enzyme.

63. (Previously presented) The genetic construct of claim 59, wherein the second gene codes for rennin or hirudin.

64. (Previously presented) The genetic construct of claim 59, wherein the second gene is a gene which, when expressed in said plant cell, confers an output trait on said plant cell.

65. (Previously presented) The genetic construct of claim 59, wherein the second gene codes for an anti-sense RNA.

66. (Previously presented) The genetic construct of claim 64, wherein said output trait is selected from the group consisting of altered oil or meal composition, reduced antinutritional content, and altered processing characteristics.

67. (Cancelled)

68. (Currently amended) The genetic construct of ~~claim 67~~ claim 59, wherein the gene encoding IAMH is oncogene 2 from *Agrobacterium tumefaciens*.

69. (Previously presented) The genetic construct of claim 59, wherein the conditionally lethal gene is adapted to be expressed in said plant in response to a chemical or physiological stress applied to said plant cell.

70. (Previously presented) The genetic construct of claim 59, wherein the conditionally lethal gene is configured to express a gene product lethal to said plant upon application of an exogenous substance to said plant cell.

71. (Cancelled)

72. (Previously presented) The genetic construct of claim 59, further comprising an inducible promoter in operable association with said conditionally lethal first gene.

73. (Previously presented) The genetic construct of claim 59, further comprising a tissue-specific promoter in operable association with said conditionally lethal first gene.

74. (Previously presented) A plant transformation vector comprising the genetic construct of claim 59.

75. (cancelled)

76. (Currently amended) A transgenic plant, comprising:

a conditionally lethal first gene expressible in a plant cell of said transgenic plant, said conditionally lethal first gene being ~~selected from the group consisting of a gene encoding indoleacetamide hydrolase (IAMH), a gene encoding isopentyltransferase, a gene encoding methoxinine dehydrogenase, a gene encoding rhizobitoxine synthase, and a gene encoding phosphonate monoester hydrolase;~~ and

a second gene expressible in said plant cell of said transgenic plant, said second gene, when expressed in said plant cell, conferring a non-naturally occurring trait of interest on said plant cell, said second gene being selected from the group consisting of:

- (a) a gene which, when expressed in said plant cell, confers insect resistance on said plant cell;
- (b) a gene which, when expressed in said plant cell, confers an output trait on said plant cell;
- (c) a gene encoding an industrially useful enzyme;
- (d) a gene encoding a pharmaceutically active compound;
- (e) a gene encoding rennin or hirudin; and

- (f) a gene encoding an antisense RNA.

77-79. (Cancelled)

80. (Currently amended) A method for selectively removing at least one plant from a growing environment, comprising:

transforming at least one plant cell with a genetic construct including:

a conditionally lethal first gene expressible in said at least one plant cell, said conditionally lethal first gene being ~~selected from the group consisting of a gene encoding indoleacetamide hydrolase (IAMH), a gene encoding isopentyltransferase, a gene encoding methoxinine dehydrogenase, a gene encoding rhizobitoxine synthase, and a gene encoding phosphonate monoester hydrolase;~~ and

a second gene expressible in said at least one plant cell, said second gene, when expressed in said at least one plant cell, conferring a non-naturally occurring trait of interest on said at least one plant cell, said second gene being selected from the group consisting of:

- (a) a gene which, when expressed in said plant cell, confers insect resistance on said plant cell;
- (b) a gene which, when expressed in said plant cell, confers an output trait on said plant cell;
- (c) a gene encoding an industrially useful enzyme;
- (d) a gene encoding a pharmaceutically active compound;
- (e) a gene encoding rennin or hirudin; and
- (f) a gene encoding an antisense RNA.;

regenerating the at least one plant cell to at least one whole plant; and

applying a chemical agent to said at least one whole plant, said chemical agent being configured to be converted into a phytotoxic agent of said at least one whole plant by one or more gene products of said conditionally lethal gene, wherein said chemical agent comprises an indoleamide or a related auxin derivative that is a substrate for IAMH.

81. (Previously presented) The method of claim 80, wherein said applying said chemical agent comprises applying said chemical agent in an amount selected to effect a sub-lethal level of said phytotoxic agent in said at least one whole plant upon said conversion by said one or more gene products of said conditionally lethal gene.

82. (Previously presented) The method of claim 81, further comprising visually identifying a sub-lethal phenotype of said at least one whole plant.

83. (Cancelled)

84. (Currently amended) The method of ~~claim 83~~ claim 80, wherein the chemical agent is naphthalene acetamide.

85-87. (Cancelled)

88. (Currently amended) A method for selecting a germinating seed or plant embryo comprising a transgene, comprising:

providing at least one transgenic plant cell of a plant seed or plant embryo, said at least one transgenic plant cell including a transgene encoding indoleacetamide hydrolase (IAMH);

culturing the at least one transgenic plant cell on a medium comprising an auxin transport inhibitor and an indoleamide or a related auxin derivative that is a substrate for IAMH; and

visually identifying the at least one transgenic plant cell by its expression of a sub-lethal auxin-overproduction phenotype.

89. (Cancelled)

90. (Currently amended) The method of ~~claim 89~~ claim 88, wherein the auxin transport inhibitor is selected from the group consisting of N-(1-naphthyl)phthalamic acid, 2,3,5-triiodobenzoic acid, 9-hydroxyfluorene-9-carboxylic acid, erythrosine, eosine, fluorescein, semicarbazone, and ethanphon.

91. (Currently amended) The method of ~~claim 89~~ claim 88, wherein said indoleamide or related auxin derivative that is a substrate for IAMH is naphthalene acetamide and the auxin transport inhibitor is naphthylphthalamic acid.

92. (Previously presented) The method of claim 88, wherein the at least one plant cell comprises a seed or a plant embryo.

93-95. (Cancelled)

96. (Previously presented) The method of claim 88, further comprising transferring the at least one transgenic plant cell to a second medium free from indoleamide and recovering the at least one transgenic plant cell.

97. (Previously presented) The method of claim 96, wherein the second medium comprises naphthalene acetic acid.

98. (Previously presented) The method of claim 88, further comprising transforming at least one plant cell with oncogene 2 of *Agrobacterium tumefaciens* to obtain said at least one transgenic plant cell.

99. (Previously presented) A method for producing a transgenic plant comprising a transgene encoding indoleacetamide hydrolase (IAMH), comprising:

providing at least one transgenic plant cell of a plant seed or plant embryo, said at least one transgenic plant cell including a transgene encoding IAMH;

culturing the at least one transgenic plant cell on a medium comprising naphthalene acetamide and an auxin transport inhibitor;

visually identifying the at least one transgenic plant cell by its expression of a sub-lethal auxin-overproduction phenotype; and

transferring the at least one transgenic plant cell to a second medium comprising naphthalene acetic acid to recover the at least one transgenic plant cell.

100. (Previously presented) The transgenic plant of claim 76, wherein the second gene is a gene which, when expressed in said plant cell, confers insect resistance on said plant cell.

101. (Previously presented) The transgenic plant of claim 76, wherein the second gene codes for a pharmaceutically active compound.

102. (Previously presented) The transgenic plant of claim 76, wherein the second gene codes for an industrially useful enzyme.

103. (Previously presented) The transgenic plant of claim 76, wherein the second gene codes for rennin or hirudin.

104. (Previously presented) The transgenic plant of claim 76, wherein the second gene is a gene which, when expressed in said plant cell, confers an output trait on said plant cell.

105. (Previously presented) The transgenic plant of claim 76, wherein the second gene codes for an anti-sense RNA.

106. (Previously presented) The transgenic plant of claim 76, wherein said output trait is selected from the group consisting of altered oil or meal composition, reduced antinutritional content, and altered processing characteristics.

107. (Cancelled)

108. (Previously presented) The transgenic plant of claim 76, wherein the gene encoding IAMH is oncogene 2 from *Agrobacterium tumefaciens*.

109. (Previously presented) The transgenic plant of claim 76, wherein the conditionally lethal gene is adapted to be expressed in said plant in response to a chemical or physiological stress applied to said plant.

110. (Previously presented) The transgenic plant of claim 76, wherein the conditionally lethal gene is configured to express a gene product lethal to said plant upon application of an exogenous substance to said plant cell.